



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,712	09/21/2001	Stan J. Simpson	08998-00693	4279
37705	7590	07/06/2006	EXAMINER KUMAR, RAKESH	
GREENBERG TRAURIG, LLP 1200 SEVENTEENTH STREET, SUITE 2400 DENVER, CO 80202			ART UNIT 3654	PAPER NUMBER

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/960,712

Applicant(s)

SIMPSON ET AL.

Examiner

Rakesh Kumar

Art Unit

3654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Amendment Filed 02/03/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-29 and 33-43 is/are pending in the application.
- 4a) Of the above claim(s) 1-15, 30-32 and 44-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-29 and 33-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/21/01; 07/20/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **Final Rejection**

Applicant's arguments filed 02/13/2006 have been fully considered but they are not persuasive for reasons detailed below.

Claims 1-14,32 and 44-46 cancelled by the Applicant in Amendment filed 02/13/2006 and previous amendments.

Claims 15, 30 and 31 withdrawn from consideration from application by the Applicant in Amendment filed 02/13/2006.

Claims 16-29 and 33-43 are pending in this Office Action.

The prior art rejections are maintained or modified as follows:

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "front inner surface" on line 9 and recites the limitation "front surface" on line 12. It is unclear whether the "front inner surface" is the same member as the "front surface". It is construed by the Office to mean the two elements are the same. Appropriate action is required.

### ***Claim Objections***

Claim 33 is objected to because of the following informalities: " than" in line 19 should be removed, to read "at an angle greater than or equal to 90.5 degrees".  
Appropriate correction is required.

### **Claim Rejections - 35 USC § 102**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16, 19, 22, 23, 26-29, 34-37 and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Hastings, Jr. 3,083,853.

Hasting '853 discloses a mast for forklift truck comprising a carriage assembly 50, Fig. 2, having a first upper roller 64, a first lower roller 58, a second upper roller 64, and a second lower roller 58 and a front surface, and a first rail section, Fig. 5 including a first rail 18 and a second rail 18 positioned substantially parallel to each other, each rail 18 having a back inner surface (right hand portion in Figs 59) being substantially parallel to the front surface, a front inner surface (116) and a lateral inner surface (middle portion) adjacent to

the front inner surface and the lateral inner surface is substantially normal to the front surface, wherein each of the front inner surface and the lateral inner surface of respective first and second rails is about  $92^\circ$ .

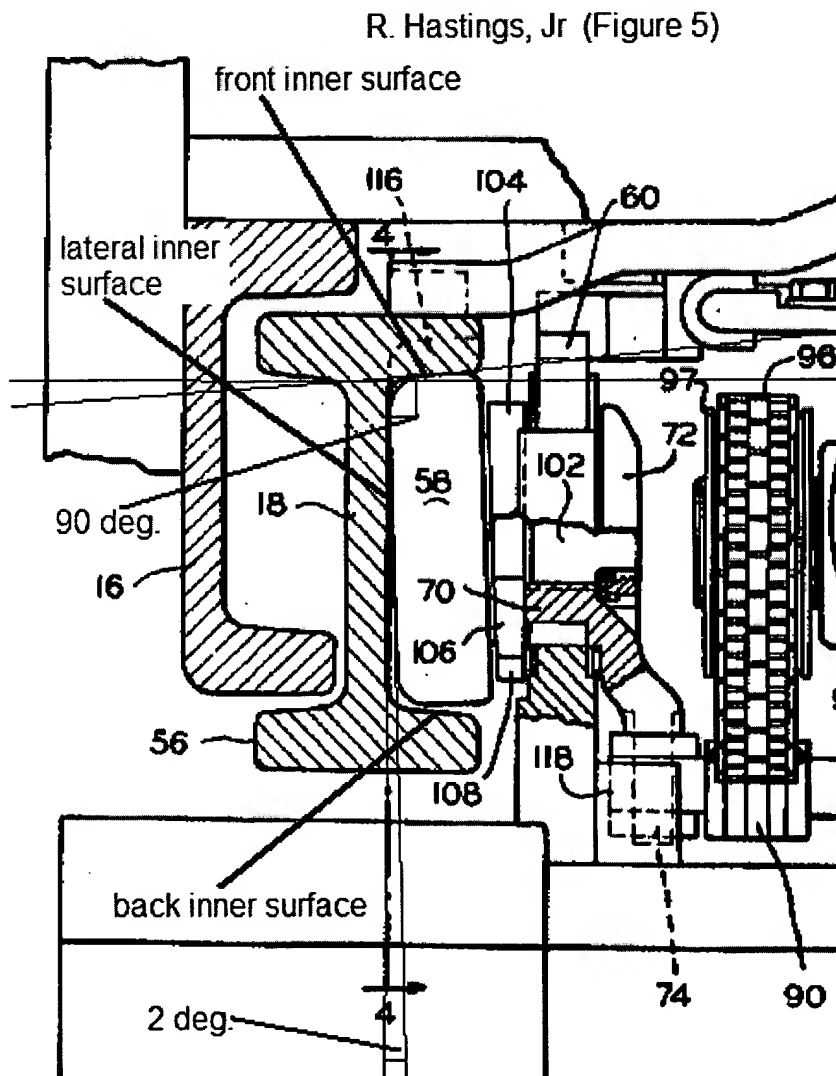
Re claim 34, Fig. 5. shows a first rail comprises a first inner surface including a first back inner surface, a first front inner surface substantially opposite the first back inner surface, a first lateral inner surface that connects the first back inner surface and the first front inner surface; a second rail positioned substantially parallel to the first rail, where the second rail comprises a second inner surface including a second back inner surface, a second front inner surface substantially opposite the second back inner surface, and a second lateral inner surface that connects the second back inner surface and the second front inner surface; Figure 2 shows a carriage assembly comprising a first upper roller, a second upper roller positioned substantially opposite the first upper roller, a first lower roller, a second lower roller positioned substantially opposite the first lower roller, and a front surface; wherein the first upper roller and the first lower roller of the carriage assembly are operatively guided by the first inner surface of the first rail, and the second upper roller and the second lower roller of the carriage assembly are operatively guided by the second inner surface of the second rail, to cause the front surface of the carriage assembly to move along at least a portion of the length the first rail and the second rail; wherein the first lateral inner surface has a first front portion adjacent to first front inner surface and the second lateral inner surface has a second front portion adjacent to the second front inner surface, wherein the first front portion and the second front portion are substantially normal to the front surface; wherein the

Art Unit: 3654

intersection of the first front inner surface and the first front portion forms a first angle (see Figures 5-9) between the first front inner surface and the first front portion; wherein the first angle is greater than or equal to 90.5 degrees.

Re claim 37, see Figure 5.

Re claims 41-43, the relative difference between the first angle and the second angle is about 1.0 degree.



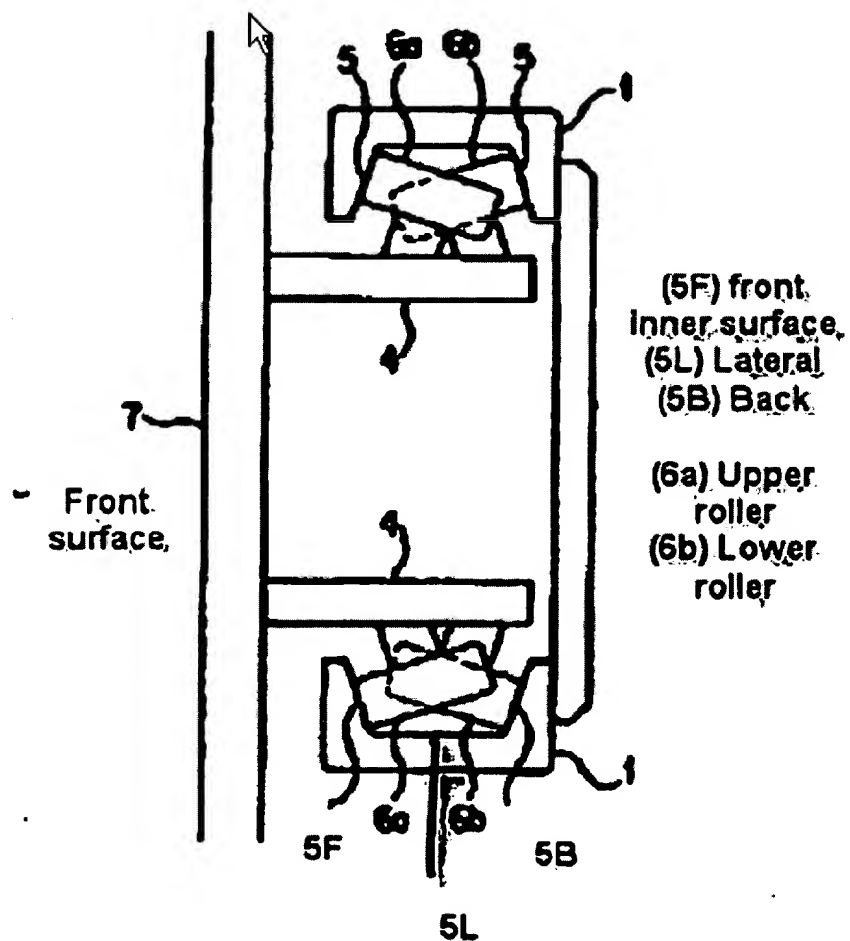
5. Claims 34, 37, 38 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 5-70092 A (JP '092).

JP'092 discloses a mast for forklift truck comprising a first rail (Figure 6) comprises a first inner surface including a first back inner surface, a first front inner surface substantially opposite the first back inner surface, a first lateral inner surface that connects the first back inner surface and the first front inner surface; a second rail positioned substantially parallel to the first rail, where the second rail comprises a second inner surface including a second back inner surface, a second front inner surface substantially opposite the second back inner surface, and a second lateral inner surface that connects the second back inner surface and the second front inner surface; a carriage assembly comprising a first upper roller, a second upper roller positioned substantially opposite the first upper roller, a first lower roller, a second lower roller positioned substantially opposite the first lower roller, and a front surface; wherein the first upper roller and the first lower roller of the carriage assembly are operatively guided by the first inner surface of the first rail, and the second upper roller and the second lower roller of the carriage assembly are operatively guided by the second inner surface of the second rail, to cause the front surface of the carriage assembly to move along at least a portion of the length the first rail and the second rail; wherein the first lateral inner surface has a first front portion adjacent to first front inner surface and the second lateral inner surface has a second front portion adjacent to the second front inner surface, wherein

Art Unit: 3654

the first front portion and the second front portion are substantially normal to the front surface; wherein the intersection of the first front inner surface and the first front portion forms a first angle (see Figures 5-9) between the first front inner surface and the first front portion; wherein the first angle is greater than or equal to 90.5 degrees.

JP "092 (Figure 6)



**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japan 5-70092 (JP '092) in view of Kelly Re. 30,815.

JP '092 discloses a mast for forklift comprising a carriage assembly having a first upper roller 6a, Figure 6, a first lower roller 6b, a second upper roller 6a, and a second lower roller 6b and a front surface, and an inner rail section comprising a first rail 1 and a second rail 1 positioned substantially parallel to each other, each rail 1 having a back inner surface, a front inner surface and a lateral inner surface (middle portion) that are capable of operatively guiding said carriage assembly along at least a portion of the length of the inner rail section, wherein the first upper roller and second upper roller on said carriage assembly are positioned relative to the front surface at an angle greater than or equal to  $90.5^{\circ}$ , wherein the front inner surface of the first guide rail and the second guide rail are positioned relative to the front surface at an angle of greater than  $90.0^{\circ}$ .

JP '092 does not disclose a multi-stage mast, namely a middle rail section and an outer rail section. Kelly Re. 30,815 discloses a forklift truck comprising an inner rail section, a middle rail section and an outer rail section to provide stacking cargo to a considerable height such as in an open yard or warehouse.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a middle rail section and an outer rail section for the fork lift of JP '092 as disclosed in Kelly reference in order to provide a higher reach.

Claims 17, 18, 20, 21, 24, 25, 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hastings, Jr. 3,083,853 in view of Yarris 4,035,040.

Hasting '853 discloses all the claimed limitations except for having a first and second upper rollers respectively having an angle relative to the front surface of about 92.5° to about 93.5°.

Yarris 4,035,040 discloses a carriage having rollers mounted at angle of about 93° relative to the front surface to improve better self-alignably transmit forces rolling between the roller's shaft and a load bearing surface.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a self-aligning rollers having a shaft mounted at an angle of about 93° relative to the front surface in order to improve the rolling force between the rollers' shaft and a load bearing surface.

### ***Response to Arguments***

Applicant's arguments with respect to independent claims 16, 33, 34 and 41 have been considered but are moot in view of the new ground(s) of rejection, see drawing above for clarification.

The applicant argues that the Office's reliance on the teaching from Hastings is mistaken because the described angle is not the same as defined by the applicant claims. The Office directs the applicant's attention to claim 16 line 16 wherein, the limitation states "the angle between said front inner surface of said first rail and said lateral inner surface of said first rail is greater than or equal to 90.5 degrees". Hastings teaches of a rail (18) with a lateral inner surface adjacent to a front inner surface, because the roller is maintained slightly tilted inwards (between 1 to 3 degrees of incline), the front inner surface is also inclined to compensate to provide a flush alignment with the roller. Thus, the angle between the front inner surface and the lateral inner surface is greater than 90 degrees plus the amount of tilt the roller is maintained at (about 2 degrees) and as a result the total angle size is about 92 degrees. See above.

Examiner has maintained the prior art rejections, as previously stated and as modified above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any references not explicitly discussed above but made of record are considered relevant to the prosecution of the instant application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rakesh Kumar whose telephone number is (517) 272-8314. The examiner can normally be reached on 8:00AM - 4:30PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see

<http://pair-direct.uspto.gov>.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RK  
June 223, 2006

  
GENE Q. CRAWFORD  
SUPERVISORY PATENT EXAMINER